

What is claimed is

1. A method for treating tumors comprising administering to a host a therapeutically effective dose of a composition comprising a platelet-derived growth factor (PDGF) aptamer and a cytotoxic agent.

2. The method of claim 1 wherein said PDGF aptamer is identified according to a method comprising:

- a) preparing a candidate mixture of nucleic acids;
- b) contacting the candidate mixture of nucleic acids with PDGF, wherein nucleic acids having an increased affinity to PDGF relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;
- c) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture; and
- d) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids enriched for nucleic acids with relatively higher affinity and specificity for binding to PDGF, whereby a nucleic acid ligand of PDGF may be identified.

3. The method of claim 1 wherein said PDGF aptamer is SEQ ID NO:1.

4. The method of claim 1 wherein said cytotoxic agent is selected from the group consisting of Bleomycin, Cisplatin, and Pt analogues; Carboplatin and Iproplatin, Cyclophosphamide, Daunorubicin, Doxorubicin, Etoposide, Epirubicin, 5-Fluorouracil, Gemzar, Ifosfamide, Melphalan, Methotrexate, Mithramycin, Mitomycin C, Mitoxanthrone, Streptozotocin, Taxol and Taxotere, Vincristine, Vinblastine, Vindesine, Vinorelbine, Topotecan and CPT-11.

5. A method for reducing the interstitial fluid pressure (IFP) of a tumor comprising administering a PDGF aptamer.

6. The method of claim 5 wherein said PDGF aptamer is identified according to a method comprising:

- a) preparing a candidate mixture of nucleic acids;
- b) contacting the candidate mixture of nucleic acids with PDGF, wherein nucleic acids having an increased affinity to PDGF relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;
- c) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture; and
- d) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids enriched for nucleic acids with relatively higher affinity and specificity for binding to PDGF, whereby a nucleic acid ligand of PDGF may be identified.

7. The method of claim 5 wherein said PDGF aptamer is SEQ ID NO:1.

8. A method for increasing the uptake of cytotoxic agents into a tumor comprising administering to a host a composition comprising a PDGF aptamer and a cytotoxic agent.

9. The method of claim 8 wherein said PDGF aptamer is identified according to a method comprising:

- a) preparing a candidate mixture of nucleic acids;
- b) contacting the candidate mixture of nucleic acids with PDGF, wherein nucleic acids having an increased affinity to PDGF relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;
- c) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture; and
- d) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids enriched for nucleic acids with relatively higher affinity and specificity for binding to PDGF, whereby a nucleic acid ligand of PDGF may be identified.

11. The method of claim 8 wherein said cytotoxic agent is selected from the group consisting of Bleomycin, Cisplatin, and Pt analogues; Carboplatin and Iproplatin, Cyclophosphamide, Daunorubicin, Doxorubicin, Etoposide, Epirubicin, 5-Fluorouracil, Gemzar, Ifosfamide, Melphalan, Methotrexate, Mithramycin, Mitomycin C, Mitoxanthrone, Streptozotocin, Taxol and Taxotere, Vincristine, Vinblastine, Vindesine, Vinorelbine, Topotecan and CPT-11.